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PTO/SB/01 (10-00)

Approved for use through 10/31/2002. OMB 0651-0032

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DECLARATION — Utility or Design Patent Application

Direct all correspondence to: Customer Number
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR :

A petition has been filed for this unsigned inventor

Given Name
(first and middle [if any]) VanEric Edward

Family Name Stein
or Surname

Inventor's
Signature

Date 6 October 2003

Residence: City Allentown

PA
State

USA
Country

USA
Citizenship

Mailing Address
1090 Dylan Drive

Mailing Address

Allentown
City

PA
State

18104
ZIP

USA
Country

NAME OF SECOND INVENTOR:

A petition has been filed for this unsigned inventor

Given Name
(first and middle [if any]) Michael Francis

Family Name Carolan
or Surname

Inventor's
Signature

Date 7 October 2003

Residence: City Allentown

PA
State

USA
Country

USA
Citizenship

Mailing Address
1091 Treeline Drive

Mailing Address

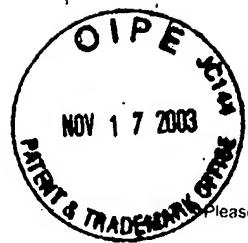
Allentown
City

PA
State

18103
ZIP

USA
Country

Additional inventors are being named on the 4 supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.



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PTO/SB/02A (11-00)

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DECLARATION

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of 4

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any])		Family Name or Surname		
Christopher M.		Chen		
Inventor's Signature	<i>Christopher M Chen</i>			Date <i>7 October 2003</i>
Residence: City	PA State	USA Country	USA Citizenship	
Mailing Address 1602 Fieldstone Street				
Mailing Address				
City	Allentown	PA State	ZIP	18106 USA Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any])		Family Name or Surname		
Phillip Andrew		Armstrong		
Inventor's Signature	<i>Phillip Armstrong</i>			Date <i>8 Oct 03</i>
Residence: City	PA State	USA Country	USA Citizenship	
Mailing Address 5071 Roth Road				
Mailing Address				
City	Orefield	PA State	ZIP	18069 USA Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any])		Family Name or Surname		
Harold W.		Wahle		
Inventor's Signature	<i>Harold W. Wahle</i>			Date <i>9/19/03</i>
Residence: City	OH State	USA Country	USA Citizenship	
Mailing Address 2314 Beechmoor Drive				
Mailing Address				
City	North Canton	OH State	ZIP	44720 USA Country

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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DECLARATION

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 2 of 4

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any])		Family Name or Surname		
Theodore R.		Ohrn		
Inventor's Signature	<i>Theodore R. Ohrn</i>		9/23/03 Date	
Residence: City	OH State	USA Country	USA Citizenship	
Mailing Address 1390 Mishler Street				
Mailing Address				
City	Alliance	OH State	ZIP	44601 USA Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any])		Family Name or Surname		
Kurt E.		Kneidel		
Inventor's Signature	<i>Kurt E. Kneidel</i>		9/23/03 Date	
Residence: City	OH State	USA Country	USA Citizenship	
Mailing Address 2041 Overcrest Street				
Mailing Address				
City	Alliance	OH State	ZIP	44601 USA Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any])		Family Name or Surname		
Keith Gerard		Rackers		
Inventor's Signature	<i>Keith Gerard Rackers</i>		9/23/03 Date	
Residence: City	OH State	USA Country	USA Citizenship	
Mailing Address 612 East Main Street				
Mailing Address				
City	Louisville	OH State	ZIP	44641 USA Country

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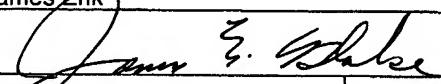
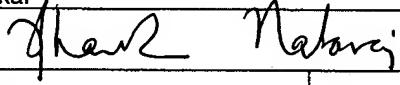
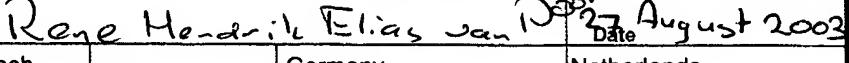
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DECLARATION

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 3 of 4

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
James Erik		Blake	
Inventor's Signature			23-Sept-03 Date
Residence: City	OH State	USA Country	USA Citizenship
Mailing Address 1536 Gulf Street NW			
Mailing Address			
City	OH State	ZIP	44685 USA Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Shankar		Nataraj	
Inventor's Signature			Oct 10, 03 Date
Residence: City	PA State	USA Country	India Citizenship
Mailing Address 1012 South Hillview Drive			
Mailing Address			
City	PA State	ZIP	18103 USA Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Rene Hendrik Elias		van Doorn	
Inventor's Signature			27 August 2003 Date
Residence: City	State	Germany Country	Netherlands Citizenship
Mailing Address Karoline Schnizlerweg 10			
Mailing Address			
City	State	ZIP	Germany Country

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DECLARATION

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 4 of 4

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Merrill Anderson		Wilson	
Inventor's Signature	<i>Merrill A. Wilson</i>		Date <u>September 29, 2003</u>
Residence: City	UT State	USA Country	USA Citizenship
Mailing Address 3528 West Piera Circle			
Mailing Address			
City	West Jordan	UT State	ZIP 84084 USA Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature			Date
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	ZIP	Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature			Date
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	ZIP	Country

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**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: VanEric Edward Stein et al.Application No./Patent No.: 10/635,695 Filed/Issue Date: 08/06/2003Entitled: Ion Transport Membrane Module and Vessel SystemAir Products and Chemicals, Inc., a corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is _____ %

in the patent application/patent identified above by virtue of either:

A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet.

Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

14 November 2003

Date

Mark L. Rodgers

Typed or printed name

Signature

Assistant General Counsel, Patents

Title

Docket # 06419 USA

ASSIGNMENT

For value received, we, VanEric Edward Stein, Michael Francis Carolan, Christopher M. Chen, Phillip Andrew Armstrong, Harold W. Wahle, Theodore R. Ohrn, Kurt E. Kneidel, Keith Gerard Rackers, James Erik Blake, Nataraj Shankar, Rene Hendrik Elias van Doorn, Merrill Anderson Wilson, hereby sell, assign, and transfer to **AIR PRODUCTS AND CHEMICALS, INC.**, a corporation of the State of Delaware, having an office at 7201 Hamilton Boulevard, Allentown, PA 18195-1501, the entire right, title, and interest in and to the invention relating to

ION TRANSPORT MEMBRANE MODULE AND VESSEL SYSTEM

described in our application for Letters Patent of the United States (identified by Docket No. 06419 USA) executed of even date herewith, in and to all Letters Patent which may be issued upon said application, in and to any divisional or reissue applications based thereon, and in and to all Letters Patent upon said invention or improvements which may be granted in foreign countries. We hereby also assign and convey to said **AIR PRODUCTS AND CHEMICALS, INC.**, all the rights accruing to us by virtue of the International Convention for the Protection of Industrial Property (Art. 4), including the right to apply for and to have patents issued in its own name.

And we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and the Officials of the Patent Offices of all other countries to issue the Letters Patent of their respective countries to said **AIR PRODUCTS AND CHEMICALS, INC.**, as assignee of the entire right, title, and interest in and to the same.

And we hereby promise and agree to execute all papers and perform all acts necessary to secure to and vest in said **AIR PRODUCTS AND CHEMICALS, INC.**, its successors and assigns, the rights conveyed as herein set forth.

VanEric Edward Stein (L.S.)
VanEric Edward Stein

6 October 2003
Date

Michael Francis Carolan (L.S.)
Michael Francis Carolan

7 October 2003
Date

Christopher M. Chen (L.S.)
Christopher M. Chen

7 October 2003
Date

Phillip Andrew Armstrong (L.S.)
Phillip Andrew Armstrong

8 Oct 03
Date

Harold W. Wahle (L.S.)
Harold W. Wahle

9/19/03
Date

Theodore R. Ohrn (L.S.)
Theodore R. Ohrn

9/27/03
Date

Kurt E. Kneidel (L.S.)
Kurt E. Kneidel

23 - Sept - 03
Date

James E. Blake (L.S.)
James Erik Blake

23 - Sept - 03
Date

Rene H. van Doorn (L.S.)
Rene Hendrik Elias van Doorn

27 August 2003
Date

Keith Gerard Rackers (L.S.)
Keith Gerard Rackers

23 - Sept - 03
Date

Nataraj Shankar (L.S.)
Nataraj Shankar

10 - Oct - 03
Date

Merrill A. Wilson (L.S.)
Merrill Anderson Wilson

September 29 2003
Date